Year 1 – Mathematics Intent

Block	Topic	Term	Number of Weeks	Retrieval Focus
1	Number and Place Value to 10		Estimated – 4 weeks	
2	Addition and Subtraction to 10		Estimated – 7 weeks	
3	Number and Place Value to 20		Estimated – 4 weeks	
4	Addition and Subtraction to 20		Estimated – 6 weeks	
5	Geometry Shape		Estimated – 2 weeks	
6	Fractions		Estimated – 2 weeks	
7	Geometry Position & Direction		Estimated – 1½ weeks	
8	Measures - Time		Estimated – 1½ weeks	
9	Number and Place Value beyond 20		Estimated – 3 weeks	
10	Multiplication and Division		Estimated – 2 weeks	
11	Measures - Money		Estimated – 1 week	
12	Measures – Length, Mass, Capacity		Estimated – 3 weeks	
You may need time to revisit some more challenging elements of Addition and Subtraction again at the end of the year in addition to consolidating through Measures.				

First 4 Maths

Year 1 – Mathematics Intent

Block 1 Number and Place Value to 10			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	1NPV–1 Count within 100, forwards and backwards, starting with any number.	• Can count to 10 forwards starting from any number • Can count backwards to zero starting from any number up to 10	*Recap Counting from 1-10 and using this to accurately count sets of objects, pictures, sounds and actions *Counting forwards & backwards from different start numbers *One more/one less *Missing Number Sequences * Comparing amounts & using associated vocab * Comparing numbers & using associated vocab and symbols < > and = *Ordering numbers including use of ordinal numbers – first, second, third * Representing numbers using number lines
Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens		• Can consistently count a set of objects to 10 accurately • Can read numbers from 1 – 10 in numerals • Can order objects using language *first, second, third* • Can write numbers to 10 in numerals • Can complete missing number sequences to 10	
Given a number, identify one more and one less		• Can identify one more than a given number to 10 • Can identify one less than a given number to 10	
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	• Can use fingers to show any number to 10 • Can use practical equipment to represent a number to 10 • Can compare two numbers that have been created with practical equipment and explain how they are different • Can position two numbers on a marked and blank number line, compare the numbers and reason about where they have been positioned	
Read and write numbers from 1 to 20 in numerals and words.		• Can read numbers from 1 – 10 in numerals • Can write numbers from 1 – 10 in numerals including accurate formation of all numerals 0-9 (NB reading and writing in words has been left until later blocks when more in line with Y1 phonics knowledge)	

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Block 2			
Addition and Subtraction within 10			
Substantive Knowledge National Curriculum	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning Detailed in Planning Overview**
Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.	• Can begin to use addition (+), subtraction (-) and equals (=) signs to record their work • Can read the mathematical statements they have recorded • Can read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=)	*Recap Number Bonds to 4 & 5 *Introduce mathematical statements involving addition (+) and equals (=) signs *Begin to learn addition facts to 10 through partitioning and recombining (aggregation) *Use a Systematic approach *Notice Patterns in Calculations *Understand addition is commutative and equations can be reordered e.g. 7 = 3 + 4 *Adding 2 amounts by counting on (Augmentation) * Adding on a number line *Solving addition word problems *Introduce mathematical statements involving subtraction (-) and equals (=) signs *Subtraction by reduction (take away) *Subtraction on a number line *Begin to learn subtraction facts by partitioning a number *Subtraction on a part whole model *Subtraction word problems *Related facts – fact families *Inverse operations *Missing number problems *Finding the difference *Substantial problems
Represent and use number bonds and related subtraction facts within 20	1NF–1 Develop fluency in addition and subtraction facts within 10 1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	• Can represent and use number bonds and related subtraction facts up to 5, using apparatus • Can recall and use addition and subtraction facts for all numbers up to 5 • Can recall and use addition and subtraction facts for all numbers up to 10 fluently • Can recognise the effect of adding zero. • Can develop the difference between two numbers on a number line • Understands the inverse relationship between addition and subtraction • Can solve missing number calculations to 10	
Add and subtract one-digit and two-digit numbers to 20, including zero		• Can add and subtract numbers mentally, using Reordering • Can use a number line to support adding 1-digit numbers	
Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ☐ - 9.		• Can show that addition can be done in any order (commutative) • Can show that subtraction can't be done in any order • Understands and use a variety of mathematical language associated with addition and subtraction *e.g. Put together, add, altogether, total, take away, distance between, more than and less than* • Can solve missing number addition and subtraction problems involving single-digit numbers. • Can solve simple 1 step problems with addition and subtraction.	

Year 1 – Mathematics Intent

Block 3			
Number and Place Value to 20			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning Detailed in Planning Overview**
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	1NPV–1 Count within 100, forwards and backwards, starting with any number.	• Can count to 20 forwards starting from any number • Can count backwards to zero starting from any number up to 20	* Introduce the concept of 1 ten and its equivalence to ten ones * Count sets of 11-19 objects grouping the first ten – exposing the one ten and __ ones structure * Understand and apply place value to identify teen numbers without counting *Apply PV to show given teen numbers using different representations * Zero as a place holder * Repeating Patterns *Counting forwards and backwards and dual counting *One more one less *Missing number sequences * Position 1-20 on different number lines (marked and unmarked) * Comparing amounts and using associated vocab *Comparing numbers & using associated vocab and symbols < > and = *Ordering Numbers *Read & Write numbers to 20 in words * Problem solving & consolidation
Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens		• Can consistently count a set of objects to 20 • Can read numbers from 1 – 20 in numerals • Can write numbers to 20 in numerals • Can complete missing number sequences forwards and backwards to 20	
Given a number, identify one more and one less		• Can identify one more than a given number to 20 • Can identify one less than a given number to 20	
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least	1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =	• Can use practical equipment to represent any number to 20 and explain the value of each digit • Can use pictorial representations to represent any number to 20 and explain value of each digit • Can compare two numbers that have been created with practical equipment • Can position two numbers on a marked number line, compare the numbers and reason about where they have been positioned • Can compare numbers using greater than and less than and the symbols < > and =	
Read and write numbers from 1 to 20 in numerals and words.		• Can read numbers from 1 – 20 in numerals • Can write numbers from 1 – 20 in numerals including accurate formation of all numerals 0-9 • Can read numbers from 1 – 20 in words • Can write numbers from 1-20 in words	

Year 1 – Mathematics Intent

Block 4 Addition and Subtraction within 20			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Read, write and interpret mathematical statements involving addition (+), subtraction (-) and equals (=) signs	1AS–2 Read, write and interpret equations containing addition (+), subtraction (-) and equals (=) symbols, and relate additive expressions and equations to real-life contexts.	• Can begin to use addition (+), subtraction (-) and equals (=) signs to record their work • Can read the mathematical statements they have recorded • Can read, write and interpret mathematical statements involving addition (+), subtraction (–) and equals (=)	* Recap addition facts within 10 - developing fluency using a variety of strategies including the effect of adding zero, one or two and using near doubles. *Recap addition by counting on and extend to 20 including the effect of adding zero *Solve one step problems that involve addition *Recall number bonds to 10 and use them to make bonds to 20 *Composition and addition with three parts *Adding by bridging to 10 *Recap subtraction by reduction (taking away) and by partitioning (not structure) and extend to 20 * Solve one step problems that involve subtraction * Subtracting by bridging to 10 *Understand inverse operations and fact families *Missing Number Problems *Consolidation and problem solving
Represent and use number bonds and related subtraction facts within 20	1NF–1 Develop fluency in addition and subtraction facts within 10 1AS–1 Compose numbers to 10 from 2 parts, and partition numbers to 10 into parts, including recognising odd and even numbers.	• Can recall and use addition and subtraction facts for all numbers up to 10 fluently • Can recognise the effect of adding zero. • Can represent and use number bonds and related subtraction facts up to 20, using apparatus • Can recall and use addition and subtraction facts for all numbers facts to 20 fluently • Can develop the difference between two numbers on a number line • Understands the inverse relationship between addition and subtraction • Can solve missing number calculations to 20	
Add and subtract one-digit and two-digit numbers to 20, including zero		• Can add and subtract numbers mentally, using Reordering • Can add and subtract numbers mentally, using Partitioning • Can add and subtract numbers mentally, using Bridging through 10 • Can add and subtract numbers mentally, using near doubles • Can use a number line to support adding and subtracting 2-digit and 1-digit numbers	

Year 1 – Mathematics Intent

Solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ☐ – 9.		• Can show that addition can be done in any order (commutative) • Can show that subtraction can't be done in any order • Understands and use a variety of mathematical language associated with addition and subtraction *e.g. Put together, add, altogether, total, take away, distance between, more than and less than* • Can solve missing number addition and subtraction problems involving single-digit numbers. • Can solve simple 1 step problems with addition and subtraction.	

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Block 5			
Geometry – Shape			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning Detailed in Planning Overview**
Recognise and name common 2-D and 3-D shapes, including: • 2-D shapes [for example, rectangles (including squares), circles and triangles] • 3-D shapes [for example, cuboids (including cubes), pyramids and spheres].	1G–1 Recognise common 2D and 3D shapes presented in different orientations, and know that rectangles, triangles, cuboids and pyramids are not always similar to one another. 1G–2 Compose 2D and 3D shapes from smaller shapes to match an example, including manipulating shapes to place them in particular orientations.	• Can recognise 2D shapes in a variety of orientations - rectangles (including squares) - circles - triangles • Can describe 2D shapes according to their properties (sides and corners) • Arrange 2D shapes to match a compound shape • Can recognise 3D shapes in a variety of orientations - cylinder - triangular prism - cone - cube - cuboid - pyramid - sphere • Can describe 3D shapes according to their properties (faces, vertices and edges) • Arrange 3D shapes to match a compound shape	*Discover shape knowledge from EYFS *Use everyday language to describe 2D shapes * Recognise and name common 2D shapes (rectangles (including squares), circles, triangles at a minimum) * Use correct mathematical terms to describe the properties of 2D shapes and distinguish between them * Arrange 2D shapes to match a compound shape * Use everyday language to describe 3D shapes * Recognise and name common 3D shapes (cuboids (including cubes), cylinders, spheres and pyramids) * Use correct mathematical terms to describe the other properties of 3D shapes and distinguish between them * Arrange 3D shapes to match a compound shape

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Block 6			
Fractions			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Recognise, find and name a half as one of two equal parts of an object, shape or quantity	No specific Ready to Progress statements for Fractions	• Understands fractions as equal parts of a whole • Can halve a shape or object by splitting it into two equal parts. • Can recognise one half as one of two equal parts of a whole • Can halve a quantity by splitting it into 2 equal sets	**Recognise, find and name a half as one of two equal parts of an object or shape * Recognise, find and name a half as one of two equal parts of a quantity * Recognise, find and name a quarter as one of four equal parts of an object or shape * Recognise, find and name a quarter as one of four equal parts of a quantity
Recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.		• Can quarter a shape or object by splitting it into four equal parts. • Can recognise one quarter as one of four equal parts of a whole • Can find a quarter of a quantity by splitting it into 4 equal sets	

Block 7			
Geometry – Position & Direction			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Describe position, direction and movement, including whole, half, quarter and three-quarter turns.	No specific Ready to Progress statements for Position & Direction	• Can distinguish between left and right • Can use positional language e.g. next to, top, middle and bottom, on top of, in front of, above, between, around, near, close and far • Can use ordinal language e.g. . 1st, 4th • Can use the language of direction and motion, including: left and right, up and down, forwards and backwards, inside and outside. • Can respond to the language of turns making whole turns, half turns, quarter turns and three-quarter turns • Can connect turning clockwise with movement on a clock face.	*Describe position (above, below, in front of, behind, in between, next to, inside, outside etc) *Describe direction and movement without turns (forwards, backwards, sideways, left, right, up, down) *Describe direction and movement with turns (forwards, backwards, turn left, turn right, up, down) *Describe turns (whole, half quarter and three-quarter turns)

First 4 Maths

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Block 8			
Measure – Time			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning Detailed in Planning Overview**
Sequence events in chronological order using language [for example, before and after, next, first, today, yesterday, tomorrow, morning, afternoon and evening]	No specific Ready to Progress statements for Time	• Can use language before, after, next, first in relation to time passing and sequencing of events in familiar stories or day-to-day routines • Can use terms such as morning, afternoon and evening, yesterday and tomorrow	*Sequence events and discuss using target language * Recognise and use language relating to days of the week * Recognise and use language relating to weeks, months and years *Measure and begin to record time durations – second, minute, hour *Solve practical problems for time using key vocab - quicker, slower, earlier, later *Telling the time to the nearest half an hour
Recognise and use language relating to dates, including days of the week, weeks, months and years		• Can learn the order of the days of the week and learn that weekend days are Saturday and Sunday • Can name and order the months of the year • Can record significant dates in a class calendar	
Tell the time to the hour and half past the hour and draw the hands on a clock face to show these times.		• Can tell time to the hour • Can draw hands on the clock for times to the hour • Can tell time to half past the hour • Can draw hands on the clock for times to the half hour • Can recognise times to the hour and half hour in day to day routines	
Measure and begin to record time (hours, minutes, seconds)		• Can measure in hours, seconds and minutes	
Compare, describe and solve practical problems for: time [for example, quicker, slower, earlier, later]		• Can estimate and measure whether an activity lasts longer/ less than a minute/hour • Can use language of quicker, slower, earlier and later	

Year 1 – Mathematics Intent

Block 9			
Number and Place Value beyond 20			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning Detailed in Planning Overview**
Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number	1NPV–1 Count within 100, forwards and backwards, starting with any number.	• Can count to 100 and across 100 from any given number • Can count backwards from any given number, including crossing 100	*Count in ones forwards and backwards to 100 and beyond *Skip counting in multiples of 10 *0-10 number line can be used to estimate the position of multiples of 10 on a 0-100 number line *Count objects efficiently by making groups of 10 *Understand that the position of a digit tells you the value *Show 2-digit numbers using different representations *Position 2-digit numbers on a number line *One more and one less *Ten more and ten less *Compare and order amounts and numbers *Odd & even numbers *Count in 2s forwards and backwards from any multiple *Count sets of objects by grouping in 2s *Count in 5s forwards and backwards from any multiple *Count sets of objects by grouping in 5s * Problem Solving and Consolidation
Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.	• Can read numbers from 1 – 100 in numerals • Can write numbers to 100 in numerals • Can complete missing number sequences forwards and backwards to 100 • Can count in twos to 20 forwards and backwards from any multiple • Can count in 10s to 100 forwards and backwards from any multiple • Can count in 5s to 50 forwards and backwards from any multiple • Can count in odd numbers - forwards and backwards • Can complete sequences in 2s, 5s, 10s	
Given a number, identify one more and one less		• Can identify one more than a given number to 100 • Can identify one less than a given number to 100	
Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least		• Can use practical equipment to represent any number to 100 and explain value of each digit • Can use pictorial representations to represent any number to 100 and explain value of each digit • Can compare two numbers that have been created with practical equipment • Can position numbers on a marked number line with multiples of 10 marked and reason about where they have been positioned	
Read and write numbers from 1 to 20 in numerals and words.		• Can read numbers from 1 – 20 in numerals • Can write numbers from 1 – 20 in numerals including accurate formation of all numerals 0-9 • Can read numbers from 1 – 20 in words • Can write numbers from 1-20 in words	

First 4 Maths

Year 1 – Mathematics Intent

Block 10 Multiplication and Division			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with the support of the teacher.	1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples, beginning with any multiple, and count forwards and backwards through the odd numbers.	• Can use concrete objects to double numbers to 10 • Can use concrete objects to half numbers to 20 • Can count in steps of 10 • Can count in steps of 2 • Can count in steps of 5 • Can find a total when counting in groups of 10 • Can find a total when counting in groups of 2 • Can find a total when counting in groups of 5 • Can solve word problems involving multiplication • Can use an array to represent a multiplication fact • Can divide by sharing objects equally • Can divide objects by putting into groups of 2 • Can divide objects by putting into groups of 5 • Can share objects by putting into groups of 10 • Can solve word problems involving division	*Doubling *Halving * Making equal groups * Solve multiplication problems by creating equal groups and counting in ones *Solve multiplication problems by counting in 2s, 5s and 10s *Repeated addition *Arrays *Solve division by sharing problems by creating equal groups * Solve division by grouping problems by creating equal groups *Substantial problems

Year 1 – Mathematics Intent

Block 11			
Measures - Money			
Substantive Knowledge **National Curriculum**	**Ready to Progress**	**Key Performance Indicators**	**Sequence of learning** **Detailed in Planning Overview**
Recognise and know the value of different denominations of coins and notes	No specific Ready to Progress statements for Money but use context to consolidate statements such as 1NF–2 Count forwards and backwards in multiples of 2, 5 and 10, up to 10 multiples and 1NF–1 Develop fluency in addition and subtraction facts within 10	• Can identify coins by sorting them • Can recognise the value of each coin and that some coins have a greater value than others • Can add up small amounts of money and say how much altogether • Can pay for items of a small value *e.g. 3p, 5p, 7p, 9p using coins* • Can give change using 1p coins • Can answer questions such as: *Michael had £5. He spent £3. How much did he have left?* • *Rosie had a 10p coin. She spent 3p. How much change did she get?*	*Sorting and ordering coins *Understand that the value of each coin relates to that number of pennies or pounds *Understand that the value of each note relates to that number of pounds *Making amounts *Consolidating addition and subtraction through money problems including change * Consolidate multiplication and division through money problems

Year 1 – Mathematics Intent

<table>
<tr><th colspan="4">Block 12</th></tr>
<tr><th colspan="4">Measure – Length, Mass & Capacity</th></tr>
<tr><th>Substantive Knowledge

National Curriculum</th><th>Ready to Progress</th><th>Key Performance Indicators</th><th>Sequence of learning
Detailed in Planning Overview</th></tr>
<tr><td>Compare, describe and solve practical problems for:
• lengths and heights [for example, long/short, longer/shorter, tall/short, double/half]</td><td rowspan="4">No specific Ready to Progress statements for Measures but use context to consolidate statements such as 1NF–1 Develop fluency in addition and subtraction facts within 10 and 1NPV–2 Reason about the location of numbers to 20 within the linear number system, including comparing using < > and =</td><td>• Can use direct comparison or non-standard units to compare lengths and heights
• Can estimate and measure whether an object is longer or shorter than a metre stick/ a class ruler
• Can use language of longer/ shorter, tall/ short, double/ half in relation to length and height</td><td rowspan="4">*Solve practical problems using direct comparison of lengths, heights and width
*Solve practical problems using non-standard units to measure lengths, heights and widths
*Measure and begin to record lengths and heights using standard units (cm & m) and use to solve practical problems
*Solve practical problems using direct comparison of capacity and volume
*Solve practical problems using non-standard units to measure capacity and volume
*Measure and begin to record capacity and volume using standard units (litres) and use to solve practical problems
*Solve practical problems using direct comparison of weight/mass
*Solve practical problems using non-standard units to measure weight/mass
*Measure and begin to record weight/mass using standard units (kg) and use to solve practical problems</td></tr>
<tr><td>Compare, describe and solve practical problems for:
• mass/weight [for example, heavy/light, heavier than, lighter than]</td><td>• Can compare mass of objects by holding them and using direct comparison
• Can use balance scales to compare the mass of objects using direct comparison or non-standard units
• Can estimate and measure whether an object weighs more or less than a kilogram
• Can use language of heavy/ light, heavier than and lighter than in relation to mass/weight</td></tr>
<tr><td>Compare, describe and solve practical problems for:
• capacity and volume [for example, full/empty, more than, less than, half, half full, quarter]</td><td>• Can use direct comparison or non-standard units to compare the capacity of different vessels
• Can estimate and measure whether a container contains more or less than a litre jug
• Can use language of full/empty, more than/less than, half, full, quarter in relation to capacity/volume</td></tr>
<tr><td>Measure and begin to record the following:
• lengths and heights
• mass/weight
• capacity and volume</td><td>• Can use manageable standard units to measure: Length and height (cm and m)
• Can use manageable standard units to measure: Mass/weight (kg)
• Can use manageable standard units to measure: Capacity/volume (l)
• Can decide which measuring tool could be used in a particular situation</td></tr>
</table>